FLATHEAD COUNTY SOLID WASTE DISTRICT

2008 SOLID WASTE REPORT





Prepared by: Flathead County Solid Waste District 4098 Highway 93 North Kalispell, MT 59901 406-758-5910 trash@flathead.mt.gov

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RESOLUTION 78

RESOLUTION 78

WHEREAS the Board of County Commissioners of Flathead County, State of Montana, in regular meeting duly assembled on the 2nd day of December, 1969, having determined that it is in the best interests for the public welfare of the citizens of Flathead County hereby adopt the following Resolution:

BE IT HEREBY RESOLVED that pursuant to the provisions of Chapter 71, Montana Session Laws of 1969, this Board intends to create a refuse disposal district known as Flathead County Refuse Disposal District in order to meet the existing need for suitable areas and facilities to dispose of the refuse generated by the residents, commercial establishments and industries located within the county; that the boundaries of said district shall be the boundaries of Flathead County as defined in Section 16-215 RCM 1947, which is incorporated herein by this reference; that no collection service is contemplated at the present time and the district will establish and maintain a series of dumpgrounds at various locations in the county for the use of the residents and the municipal and privately operated collection services; that the estimated cost of the service to be provided is \$12.00 per year per family residential unit.

BE IT FURTHER RESOLVED that notice of the adoption of this Resolution of Intent be given by transmitting copies to the executive head of the cities of Columbia Falls, Kalispell and Whitefish, and if concurrence from each city council is received, by publication of a notice of passage of the resolution and concurrence thereon in the Daily Inter Lake for ten consecutive days and in the Whitefish Pilot and the Hungry Horse News for two consecutive weekly issues, which notice shall describe the character of the proposed service and estimated cost thereof and indicate a time and place where written protests, delivered to the County Clerk and Recorder within thirty days of the first publication, will b e considered.

Dated this 2nd day of December, 1969

BOARD OF COUNTY COMMISSIONERS OF FLATHEAD COUNTY violination William H. Knapton, Chairman

I hereby certify the foregoing to be a true and correct copy of a Resolution adopted in regular meeting by the Board of County Commissioners of Flathead County on the 2nd day of December, 1969.

Glenn E. Millhouse, Clerk

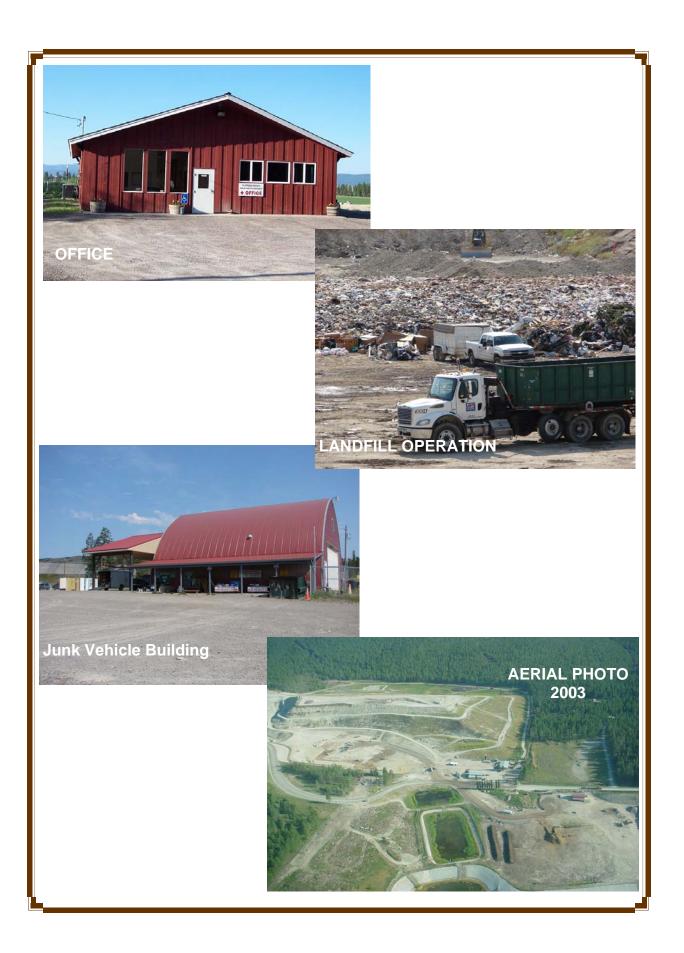
MISSION STATEMENT



The Flathead County Solid Waste District Provides Environmentally Sound And Cost Effective Refuse Collection, Disposal And Recycling Opportunities For Flathead County Residents and Businesses. Our Facilities Are a Major Part Of The Economic And Environmental Infrastructure Of Flathead County. Long Range Planning And Fiscal Integrity Ensures Decades Of Capacity Without Financial Burdens In The Future.

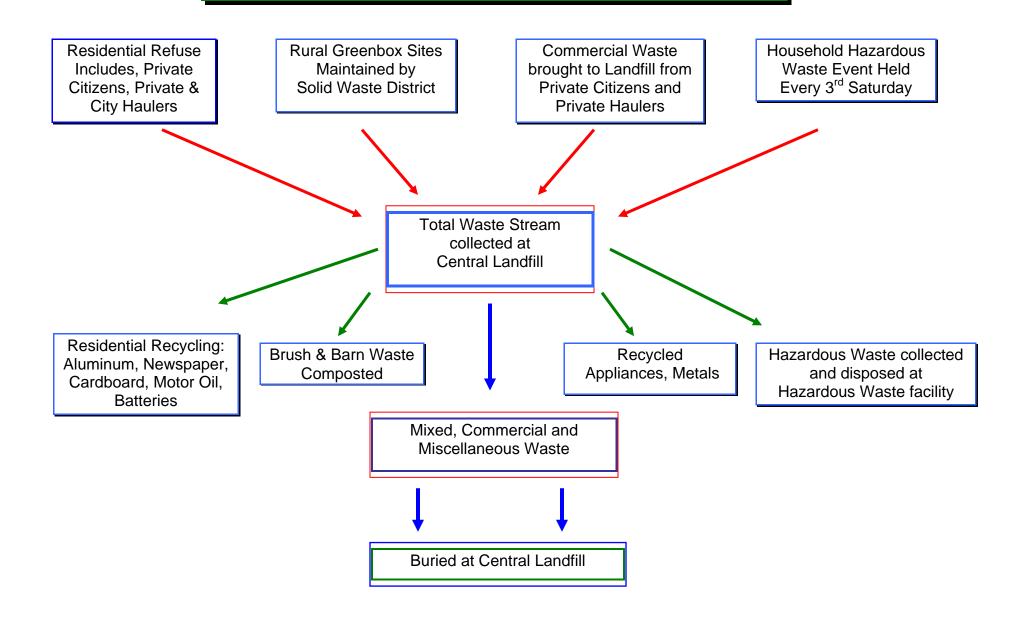


FLATHEAD COUNTY SOLID WASTE DISTRICT
Aerial Photograph taken July 11, 2008





Flathead County Solid Waste District Flow of Waste Stream



STATE OF THE FCSWD Fiscal Year 2008 (July '07 through June '08)

A. Personnel – The District maintains a staff of 22.5 full time equivalent employees: six county matrix and 16.5 union. Two union employees are full time seasonal (May through October) with the remaining employees' full time permanent personnel. Of the county matrix personnel, four are full time permanent; one part time permanent position and one seasonal position (May through October). The director's position is split equally between the Road/Bridge and Solid Waste departments. With a well-trained and dedicated staff, Flathead County Solid Waste continues to operate at a highly professional level.

The County Commissioners decided to re-organize the management structure for the Solid Waste District and the County Road and Bridge Department. A Public Works Director position was created along with Operations Manager positions in each department. All positions were filled by in-house employees from the respective departments. The Commissioners desired some continuity and efficiencies from these like operational departments. So far the re-organization has been a success and the District realized a seamless transition to the new management structure.

For the third fiscal year the District employed a container site monitor/educator. This employee traveled around to the busiest container sites and informed customers of the rules and regulations for the sites. The employee hired in FY08 focused on educating the citizens on the highly abused metal recycling areas at each container site and reducing the usage by commercial interests. A large majority of citizens were very receptive to gaining information about proper disposal of various items at the container sites. A few were disgruntled by the restrictions that are now enforced. This program should continue and grow as more residents continue to move to the valley and use the container sites.

Employee training and safety continues as a high priority and was conducted in the following areas: asbestos training, hazardous waste training, landfill gas systems and operations, landfill operations and equipment maintenance and computer software utilization. Safety meetings are held monthly covering a wide range of topics including: safe driving, safe backing, handling difficult loads, nuclear medical waste, scavenging, fill sequence plan, equipment safety water truck, landfill fires, methamphetamine waste, communicating with drivers, road safety and slips/trips/falls. Other topics are discussed as warranted and participation is encouraged for all employees. There was one significant workers compensation claim in the year that resulted in lost time from work.

B. Equipment – Equipment replacement remains a highly important aspect of continued efficient operations of the District. The District purchased one new refuse hauling vehicle in the year. The District has six refuse hauling vehicles that service the out lying container sites in Flathead County. Having two boom trucks has helped tremendously in removing appliances and unfortunately, refuse from the appliance piles at the container sites. This program greatly increases the metal recycling volume for the District but the increase in unwanted materials continues to jeopardize the programs efficiency.

Heavy equipment repairs occurred as needed to all equipment. The landfill compactor (CAT 826G) had some major repair done in FY2008. The 826G compactor was scheduled to be replaced in FY2008 but was delayed one year to FY2009 after these repairs were completed. This machine will become the backup compactor when a new machine is purchased in FY09.

C. Financial Stability – The District currently operates under a combination system of an annual assessment and a pay-as-you-throw (PAYT) tipping fee for commercial customers. The District charges a residence assessment of \$80.73 per household. Businesses throughout the county are charged the annual assessment with a multiplier based upon the volume they produce and report to the District in a biennial volume study performed by the District. If information is not supplied by the business, the Flathead County Solid Waste District Board of Directors has determined a multiplier for the different kinds of businesses throughout the county.

PAYT customers are businesses that haul waste directly to the landfill, typically from the private refuse companies or contractors. This waste is assumed to be greater than the average waste generated and accounted for through the assessment system. The rate for PAYT customers is \$31.05 per ton. In FY08, the "gate" generated \$1,269,688. The assessment system generated revenues of \$4,734,046. Miscellaneous revenues, which include recycling, land lease, equipment sale and interest revenue, totaled \$442,331. The total amount of refuse deposited in the landfill in FY08 was 120,515 tons. This is a 6.23% decrease in total tonnage deposited in the landfill from FY07. A reflection of the tough economic times in the County is shown by this tonnage reduction for the landfill.

Total revenues for the District in FY08 were \$6,637,402 and expenses totaled \$7,665,735, which included transfers of \$1,476,000 to the liner expansion trust, \$600,000 to the closure/post-closure trust and \$200,000 to the landfill property acquisition trust. A total of \$191,337 was transferred out of the liner trust account into the operating budget to pay for liner installation expense for the continued operations in the Phase III liner area.

D. Facilities

Landfill – Approximately 275 acres have been permitted for waste management activities with the completion of the South Area Landfill Expansion Project. The North Area Landfill consists of 80 acres and is the current operating area. The South Area Expansion encompasses the remaining area owned by Flathead County and was approved for disposal operations by the Montana Department of Environmental Quality (DEQ) in the spring of 2006. The first lined cell was approved for use in 2002 by the DEQ. Two subsequent liner projects (Phase II-A and Phase III) have been constructed and approved for disposal activities by the DEQ. Disposal activities continued in these phases through the fiscal year. The lined areas have approximately 1.4 million cubic yards of gross capacity remaining at the end of FY08. However, some of the airspace will not be operationally efficient to utilize until subsequent liners are constructed. The District utilized approximately 224,400 cubic yards of airspace during the fiscal year. The site effective density was calculated to be 1,074 lbs/cy. This number represents the total waste deposited in the landfill divided by the gross airspace utilized (refuse and cover soil). The goal established for the site as set by the Board of Directors was 900 lbs/cy. Typically, a refuse density and a refuse to cover ratio is also calculated. In FY08 64,660 cubic yards of soil were removed from the future class III /IV, as well as from phase IV for cover operations. This translated to a refuse to soil ratio of 3.5:1 for the year. The site is balanced at a 3:1 ratio so the utilization of airspace for refuse was excellent.

The landfill gas system operated well throughout the period. Approximately 153,947,157 standard cubic feet (scf) of landfill gas was removed from the landfill and incinerated. No emissions from the system exceeded permit levels and no operating violations were received from the DEQ. The landfill is currently in excellent standing with the DEQ regarding both the operations of the solid waste license and the air quality permit.

Discussions occurred with Flathead Electric Cooperative (FEC) regarding the utilization of landfill gas for power generation. FEC is interested in the installation of a landfill gas engine or microturbine that would produce power. The power would be placed on the grid and utilized by citizens in the County to power their homes and businesses. It appears that up to 1.6 megawatts of power could be generated annually by the facility in the next five to seven years. That would be enough to power, on average, 1,600 homes in the County. This is a long term project that will have multiple capital projects associated with it and long term operations.

Corrective actions, required under the direction of the DEQ regarding the groundwater contamination from the "old" portion of the landfill, appear to be having the desired effects. The landfill gas extraction system, the up-gradient ground water diversion system and the surface water diversion system have decreased the levels of contaminate concentrations to acceptable levels at the relative point of compliance (groundwater monitoring wells at the sites perimeter). The District continued to perform semi-annual groundwater monitoring through the fiscal year.

Recycling services are provided at the landfill for many items. Old appliances are the largest single item removed from the waste stream and sent off for recycling. 13,626 appliances were received at the landfill or removed from the container sites in FY08. This material is baled up at the landfill by a contractor and typically hauled to the west coast. This fiscal year the landfill received revenue on the sale of the appliances of \$147,631. Other items recycled at the landfill include lead batteries (1,378 total count), used oil (5,450 gallons) and junk vehicles (251 total count). The junk vehicle program is administered through a grant from the State of Montana. Green waste is also collected at the landfill and is used as alternative daily cover in the landfill, composted, or ground and sent to Smurfit-Stone Container in Missoula for bio-mass in their boilers or to the new Glacier High School for heating fuel. Tonnage sent off site for biomass in FY08 totaled 1,139 tons.

b. Container Sites - Twelve refuse drop off sites serve residents throughout the County. A total of 30,313 tons were hauled from the container sites to the landfill by District trucks. There has been a decrease of 3.4% in tonnage removed from the container sites comparing FY08 to FY07. This has required the District to assess the operation of the container site program. Consolidation of the container sites has been a constant discussion item and the District started the first step in this program in FY08. Efforts began on the consolidation of the Kila and Marion sites into a new site located equidistance between the two communities. The new site would be just off Highway 2W near the Ashley Lake Road. The land is owned by the State of Montana and managed by the Department of Natural Resources and Conservation. The site would have an easement for a period of 30 years. Community discussion for this consolidation has been mostly unenthusiastic, which is not uncommon with such proposals.

The District has been working on securing the ownership of more of its container sites throughout the County and improving the sites to handle the increased volumes generated by the citizens. In FY08 attempts to purchase the Somers container site and the Olney container site

from the Montana Department of Transportation (MDT) have been unsuccessful to date. However, discussions have continued and the District has had favorable deliberations and is hopeful that these purchases will occur in the next year or so.

The recycling contract with Evergreen Disposal ended and was re-bid. Evergreen Disposal was again the successful bidder for the next five year contract. The total amount of recycled material for the fiscal year for this program was 723.63 tons. The sites with recycling opportunities remained the same. The sites are Bigfork, Columbia Falls, Coram, Creston, Kila, Lakeside, Somers and the landfill. Materials accepted are: plastics no. 1 & 2, cardboard, newspaper, office paper, shredded paper, magazines, tin and aluminum cans. Additional six-yard containers for cardboard recycling were placed at the Columbia Falls, Creston, Somers and Bigfork container site to collect the additional material being generated by residents in the community.

Discussions with Evergreen Disposal and the City of Kalispell occurred regarding the recycling bins Evergreen Disposal has been providing to the community at no expense. Evergreen hopes to cover their costs of this program with the sale of the recycled materials. They have indicated that they cannot continue with this practice due to financial reasons. A joint project between the two municipalities and Evergreen Disposal may occur so that continued recycling options exist for residents in the City of Kalispell and County residents in close proximity to the City.

E. Projects in Progress/Completed

- **a.** Landfill Gas to Energy Project As discussed previously in this report, Flathead Electric Cooperative (FEC) is interested in generating electricity by burning landfill gas in an engine which in turn will produce power through a generator. Contractual issues were discussed between the two parties incurring significant employee hours so far. The agreement for this project will likely last 20 years and then could be extended if both parties are in agreement. It is imperative that the District remain in compliance with the Montana Department of Environmental Quality and FEC must generate enough power to cover their sizeable capital investment (\$3.5 million) to build the energy plant. FEC was award clean renewable energy bonds (CREBs) from the federal government, which are interest free bonds, to help finance the facility.
- **b.** Request for Proposals for Hydrogeological and General Engineering Services The District issued and awarded consulting services for both hydrogeological and general engineering services in FY08. Hydrometrics. Inc., based in Helena, MT was awarded a three year contract for hydrogeological services and SWT Engineering from Corona, CA was awarded the general engineering services contract. Both contracts are for a three year period with the potential of two 2 year extentions if mutually agreed upon by both parties.
- **c. Maintenance Facility Improvements** A concrete pad was poured in front of the entrance to the shop addition built two years ago. The pad has steel plates on the surface so the tracked equipment can travel over the pad to the shop. The pad will help with cleaning equipment before it is brought into the shop for repairs or servicing.

F. Goals for FY08

The Board of Directors has created a set of goals to help define the direction of the District and provide a goal list for the Director to achieve during the coming fiscal year(s). The goals were broken down into duration categories to help further define the Districts direction.

The following goals were established by the FCSW Board in September 2004.

Annual Goals (Current Fiscal Year)

- 1. FY End report to summarize all landfill activities
 - a. Include new goals
 - b. Based on a fiscal year
- 2. Annual landfill effective density goal of 900 pounds/cubic yards
- 3. Annual route average of 7+ tons/load summer (April-Sept) and 6.5+ tons/load winter
- 4. Overall annual review of financial well being of District
- 5. Cumulative increase of annual assessment using the average of the last 3 years of the CPI. Example: CPI increase of 2%, 3% and 2.7% for last 3 years. Annual adjustment for each of the next 3 years would be 2.57% each year. Increase was implemented on the October 2004 tax bills.
- 6. Education continuing improvement of existing campaign
 - a. Waste Not Grant, school tours, media releases, letters to cities, radio spots
- 7. Employee Development and Safety
 - a. Continued training hours/year
- 8. Potential purchase of surrounding property around the landfill
 - a. Pursue as become available

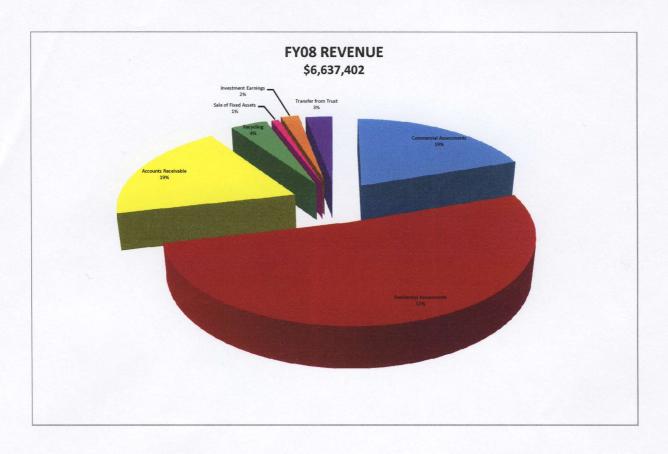
Short Term Goals (2 years or less)

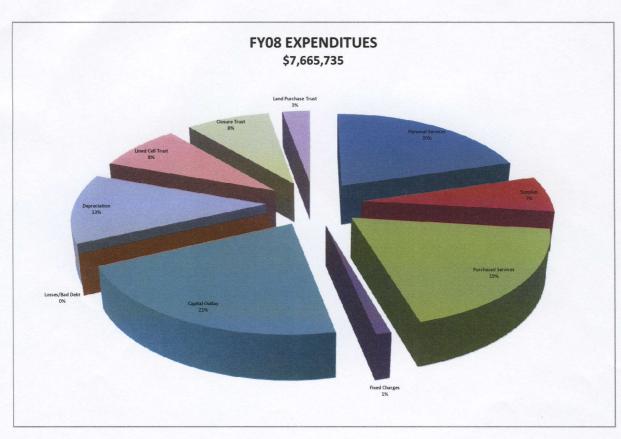
- 1. Job Description
 - a. Updating job description to include physical demands, and other data as required
- 2. Manned Container Sites
 - a. Start with Columbia Falls and then expand to other sites
 - b. Reducing out-of-county and commercial use
- 3. Controlled access for Columbia Falls, Somers and/or Bigfork
 - a. Possible inter-local agreement with Columbia Falls
 - b. Improved lighting and signage

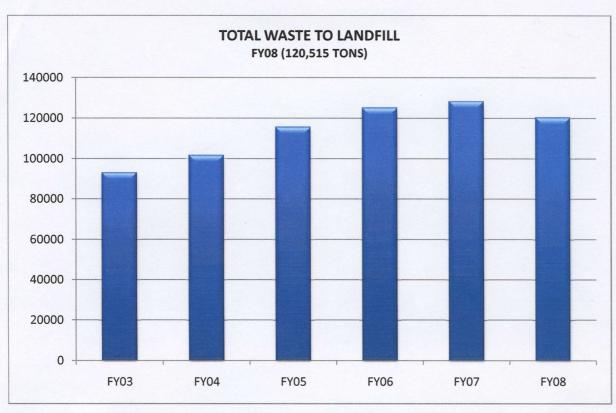
- 4. Electronic waste
 - a. Continue to research possibly start program in FY05
 - b. Current costs are high possible reduction in cost in the next year
 - c. Scale house study of volume of e-waste
- 5. Class III and IV Landfill
 - a. Director to contact DEQ
 - b. Included with licensing/closure plan for expansion project
 - c. Make stand alone project if necessary
- 6. Closure Plan
 - a. In progress, part of expansion project
- 7. New Irrigation Well
 - a. Included in FY04 budget
- 8. Tree planting & buffer for expansion of south area landfill

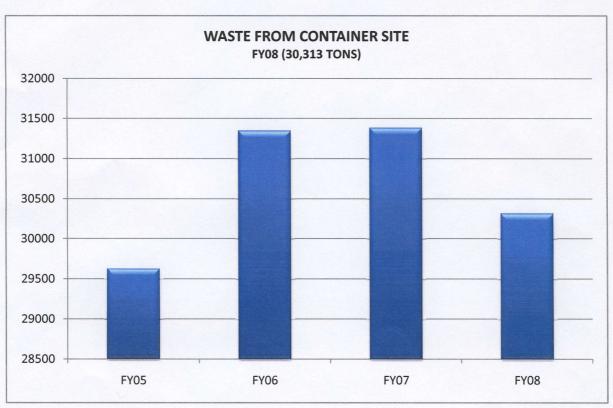
Long Term Goals (over 2 years)

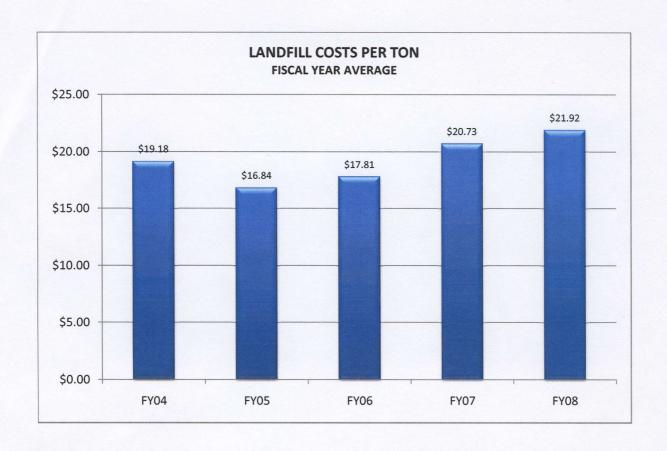
- 1. Container Site Ownership
 - a. Acquire ownership of 6 sites by end of FY06
- 2. New Shop
 - a. Tied to expansion project
- 3. Landfill Expansion Project
- 4. Increase aesthetics and buffering of container sites by use of screening, fencing or soil berms wherever feasible.

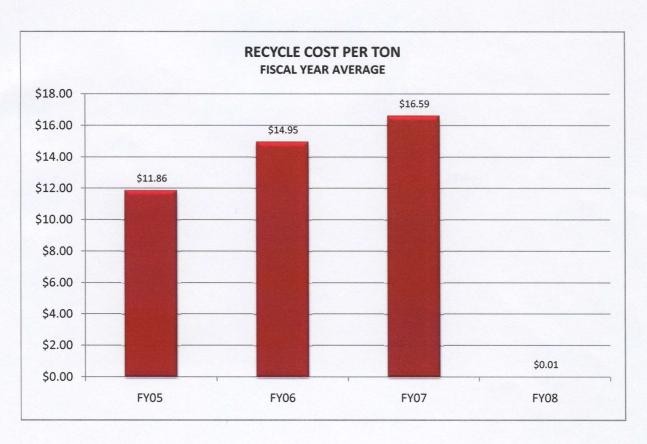


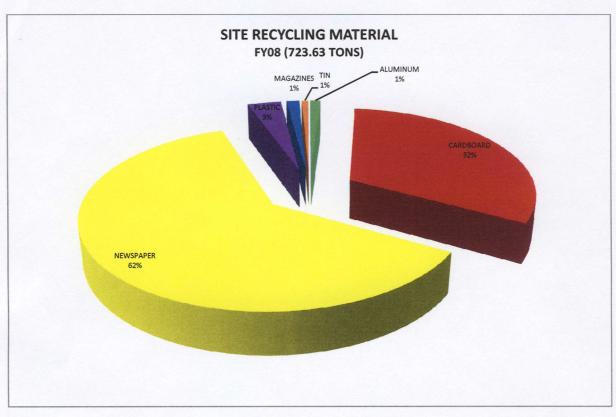


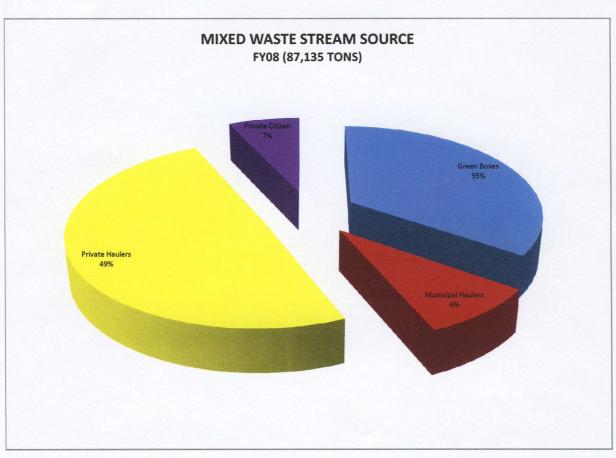


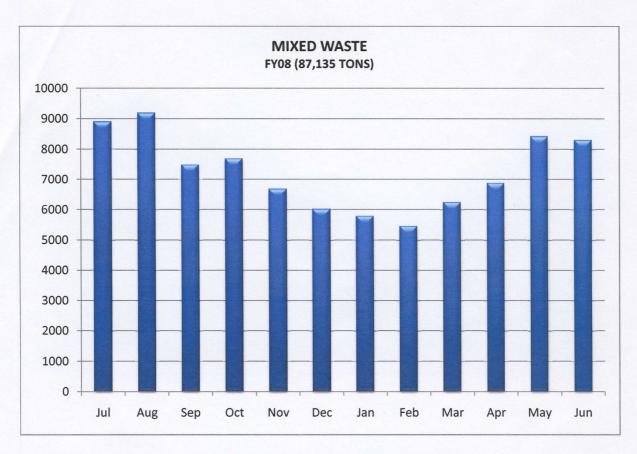


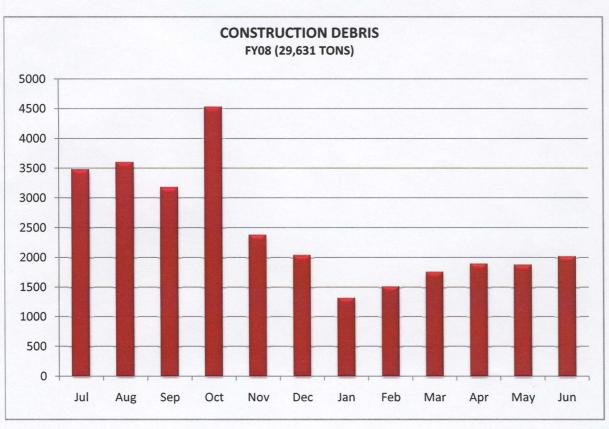


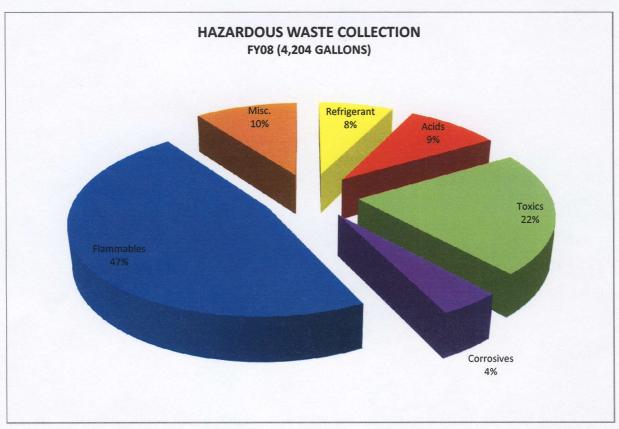


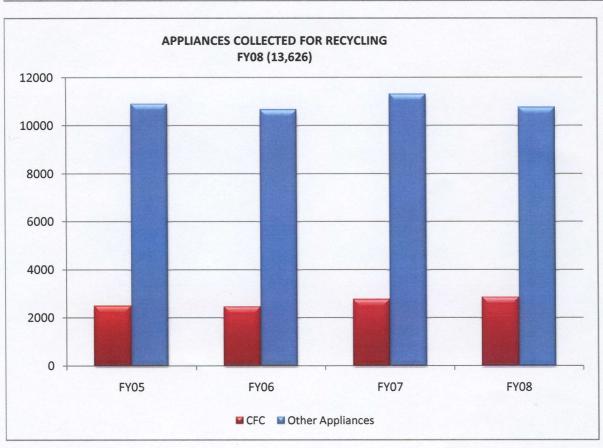


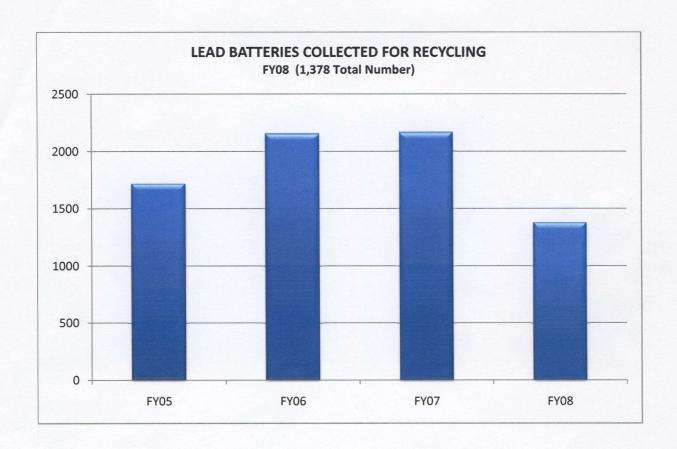


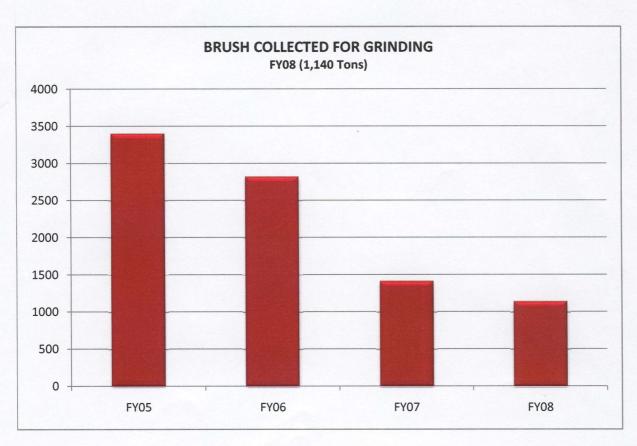


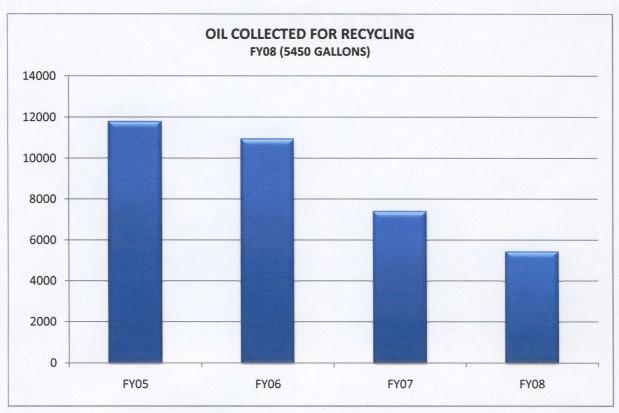


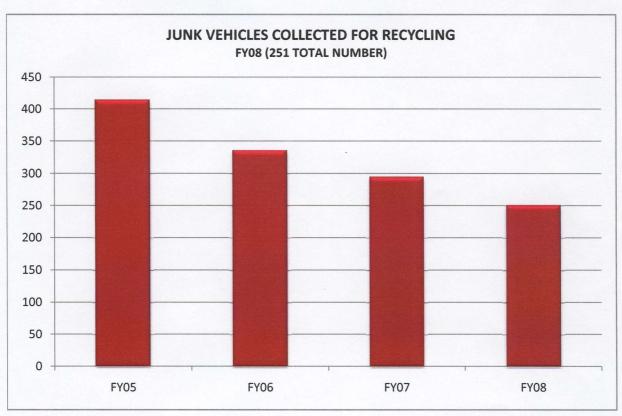


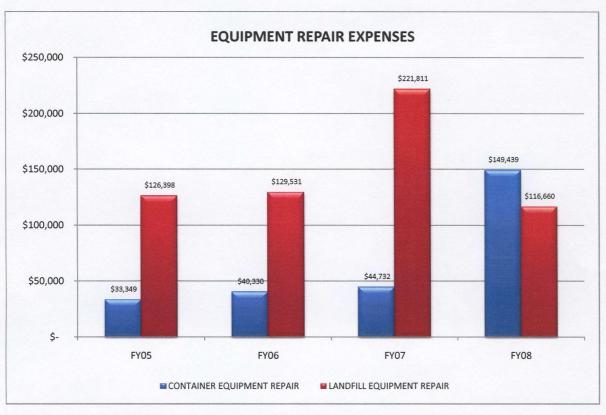


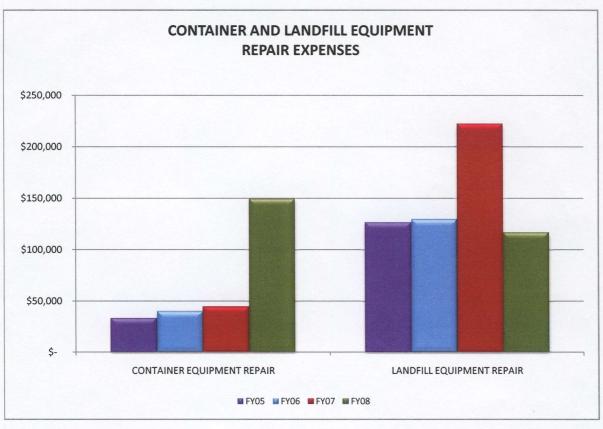












FLATHEAD COUNTY SOLID WASTE DISTRICT

Disposal Rate - \$31.05 per ton

Construction Rubble Paper/Plastic/Cardboard
Carpeting Clean Brush & Stumps
Wood Pallets Barn/Grass/Leaves
Scrap Wood Chips/Sawdust
Mobile Home Mixed Waste
Non Friable Asbestos Concrete/Asphalt

Petroleum contaminated soils Call for disposal requirements

Large Animals: \$10.00/each Small Animals: \$5.00/each

horse, cow, adult pig, llama goat, sheep, small pig, calf, emu, colt, ostrich

Bury Records-\$10.00/cy

Friable Asbestos: \$10.00/cy plus \$75.00/hr equipment charge (1/2 hour minimum)

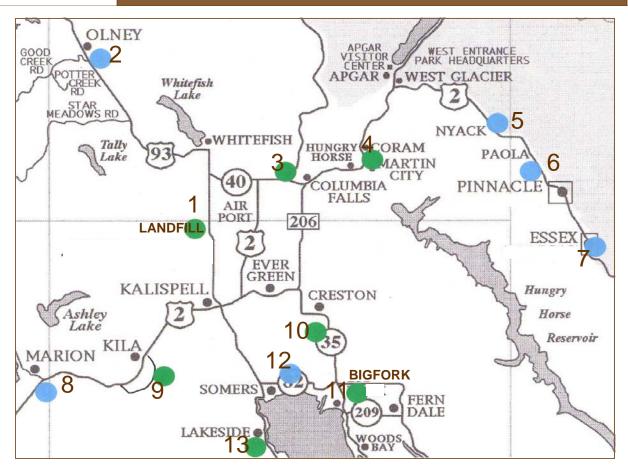
Call for disposal requirements.

NOTE: It is the responsibility of the contractor to obtain a written quote for the cost of disposal services.



FLATHEAD COUNTY SOLID WASTE DISTRICT 4098 HIGHWAY 93 NORTH, KALISPELL, MT 59901 406-758-5913 fax – 758-5918

FLATHEAD COUNTY SOLID WASTE CONTAINER SITE MAP



- 1 LANDFILL—4098 US Highway 93 North, Kalispell
- 2 OLNEY—Highway 93 West
- **COLUMBIA FALLS—Best Way** (Open 6:00 a.m. to 7:00 p.m.)
- **4 CORAM—Highway 2 East** (Open 6:00 a.m. to 7:00 p.m.)
- 5 NYACK—Highway 2 West
- 6 DENNY'S—Highway 2 East
- 7 ESSEX—Highway 2 West
- 8 MARION—Highway 2 East (Open 6:00 a.m. to 7:00 p.m.)
- 9 KILA—Kila Road
- 10 CRESTON—MT Highway 35 (Broeder Loop Rd.) (Open 6:00 a.m. to 7:00 p.m.)
- 11 BIGFORK—MT Highway 83
- 12 SOMERS—MT Highway 82 (Open 6:00 a.m. to 7:00 p.m.)
- 13 LAKESIDE—Blacktail Road
- Sites with Recycle Containers Contracted with Valley Recycling— 257-2574

Flathead County Solid Waste District Dave Prunty, Public Works Director Jim Chilton, Operations Manager 4098 Highway 93 North Kalispell, MT 59901 406-758-5910 trash@flathead.mt.gov